

SECTION 4 - SPECIFICATIONS

Input: 115/230Vac $\pm 10\%$, 50-60Hz, 16/10A

Output: See table below for Output Voltage and Output Current specifications for each Model in the 105 series.

MODEL	OUTPUT		HIGH VOLTAGE OUTPUT CONNECTOR	
	VOLTAGE	CURRENT	OUTPUT	MATING
105-01R	0 to ± 1 kV	0 to 1A	SHV 1707-1	SHV 1705-1
105-02R	0 to ± 2 kV	0 to 500mA	SHV 1707-1	SHV 1705-1
105-03R	0 to ± 3 kV	0 to 333mA	SHV 1707-1	SHV 1705-1
105-05R	0 to ± 5 kV	0 to 20mA	SHV 1707-1	SHV 1705-1
105-10R	0 to ± 10 kV	0 to 100mA	300879	300878
105-20R	0 to ± 20 kV	0 to 50mA	300879	300878
105-30R	0 to ± 30 kV	0 to 33mA	300879	300878
105-50P/N	0 to ± 50 kV	0 to 20mA	301100	301101

The complete model part number consists of the series designation followed by the model suffix, including either an R, P or N to designate the output voltage polarity.

Efficiency: 80% typical

Output Ripple. (0.1% of output voltage + 0.1% rated output voltage) peak-to-peak.

Voltage Regulation: $\pm (0.01\% + 0.01\% \text{ F.S.})$ for $\pm 10\%$ input line change.
 $\pm (0.02\% + 0.02\% \text{ F.S.})$ for FL-NL and NL-FL change.

Current Regulation: $\pm (0.05\% + 0.05\% \text{ F.S.})$ for $\pm 10\%$ input line change.
 $\pm (0.1\% + 0.1\% \text{ F.S.})$ for 0 to maximum rated output voltage.

Stability: Constant Voltage Operation
 $(0.01\% + 0.01\% \text{ F.S.})$ / hour after $\frac{1}{2}$ hr warm-up.
 $(0.02\% + 0.02\% \text{ F.S.})$ / 8hrs. after $\frac{1}{2}$ hr warm-up.

Constant Current Operation
 $(0.02\% + 0.02\% \text{ F.S.})$ / hour after $\frac{1}{2}$ hr warm-up.
 $(0.04\% + 0.04\% \text{ F.S.})$ / 8hrs. after $\frac{1}{2}$ hr warm-up.

Temp. Coeff: Constant Voltage Operation
 $(50\text{ppm} + 50\text{ppm F.S.})$ per $^{\circ}\text{C}$, 0 to $+50^{\circ}\text{C}$.

Constant Current Operation
 $(100\text{ppm} + 100\text{ppm F.S.})$ per $^{\circ}\text{C}$, 0 to $+50^{\circ}\text{C}$.

Remote Control: Independent analog voltage programming inputs for voltage and current.
0 to $+5\text{Vdc}$ for 0 to maximum output.

Local Control	Independent calibrated front panel controls for voltage and current.
Resolution:	0.2% of maximum output.
Accuracy:	$\pm (0.5\% \text{ of setting} + 0.05\% \text{ of max output} + \text{resolution})$
Meter:	Dual 4-1/2 digit LED front panel meter for reading output voltage and current simultaneously. Meter accuracy is $\pm 0.5\%$ of full-scale ± 1 digit.
Polarity:	The units up to 30kV are reversible polarity; these units include either a polarity switch on the bottom of the unit or an internal polarity reversing assembly. Units that are above 30kV are fixed polarity suffix P for positive or N for negative. The setting of the output polarity is displayed on the front panel by the \pm LED indicators on the voltmeter.
kV Monitor:	0 to +5Vdc (10.0k Ω series impedance) for 0 to max rated output voltage, $\pm (0.5\% \text{ of reading} + 0.1\% \text{ rated output})$.
mA Monitor	0 to +5Vdc (10. 0k Ω series impedance) for 0 to max rated output current, $\pm (0.5\% \text{ of reading} + 0.1\% \text{ rated output})$.
Interlock:	Remote interlock disables (high), enables (low) the high voltage output. An external jumper is required to bypass this protection.
HV Connector	The appropriate HV mating connector is provided with each unit.
Remote Connector:	The PROGRAMMING / MONITOR connector is a standard 15-pin "D" type connector. A mating connector is provided.
Input Connector:	3-wire IEC line cord receptacle (Hubbell P/N H320B) Detachable connector is included.
Features:	Remote logic status indicators provided.
Protection :	Arc, short-circuit and open circuit protection, self-restoring.
Note: Each unit can provide 0 to maximum rated output. All electrical specifications are valid from 1% to 100% of rated output.	
Cooling:	Internal fan.
Size:	19.00" W x 5.22" H x 17.00" D (483 x 133 x 432mm)
Weight:	40 lbs. (18 kg)